REMARKS/ARGUMENTS

The Examiner is thanked for the courteous telephone interview granted Applicants' representative on May 28, 2007. During the interview, a proposed amended claim 1 was discussed. During the interview, the Examiner suggested that the claim be further amended to provide additional distinguishing subject matter, and this Response is submitted pursuant to the Examiner' comments, and is believed to place the application in condition for allowance.

Claims 1, 2, 9, 10, 17 and 18 are pending in the present application. Claims 1, 2, 9, 10, 17 and 18 were amended; and claims 3-8, 11-16 and 19-24 were canceled. No claims were added. Support for the amendments can be found, for example, on page 48, line 26 to page 51, line 16 and on page 58, line 28 to page 60, line 26 of the specification, and in the canceled dependent claims, This application is believed to be in condition for allowance, and reconsideration is respectfully requested in view of the above amendments and the following comments.

I.   Specification

Pursuant to the Examiner's request, pages 1 and 2 of the specification have been amended to provide missing information regarding related applications identified therein.

Therefore, the objection to the specification has been overcome.

II.   Double Patenting

The Examiner has provisionally rejected claims 1-24 on the grounds of nonstatutory double patenting over claims 1-25 of copending application No. 10/674,642; over claims 1-25 of copending application No. 10/675,776; over claims 1-24 of copending application No. 10/675,777; over claims 1-24 of copending application No. 10/675,778; and over claims 1-24 of copending application No. 10/682,385.

In order to expedite prosecution, appropriate Terminal Disclaimers are filed herewith.

Therefore, the provisional rejections of the claims on the grounds of nonstatutory double patenting have been overcome

III.   35 U.S.C. § 101

The Examiner has rejected claims 17-24 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

As per claims 17-24: The claims recite "a computer program product" in which, within the scope of these claims, is data. The Claims recite the data in a computer readable medium, where the specification includes the medium among the non-statutory the media.

For example, in the specification, see passage,

"Examples of computer readable media include recordable-type media, such as a floppy disk, a hard disk drive, a RAM, CD-ROMs, DVD-ROMs, and transmission-type media, such as digital and analog communications links, wired, or wireless communications links using transmission forms, such as, for example, radio frequency and light wave transmissions. The computer readable media may take the form of coded formats that are decoded for actual use in a particular data processing system".

Therefore, the claims are claiming a subject mater that is not concrete and tangible. Accordingly, this type of the claims fails to be statutory.

Office Action dated February 26, 2007, pages 4-5.

In order to expedite prosecution, claim 17 has been amended to recite that it is directed to a computer program product in a recordable-type computer readable medium. As disclosed on page 64 of the specification, and as recognized by the Examiner, recordable-type computer readable media includes media such as a floppy disk, a hard disk drive, a RAM, CD-ROMs and DVD-ROMs, which are clearly concrete and tangible and which fully satisfy the requirements of 35 U.S.C § 101.

Claim 18 depends from claim 17 and also fully satisfies the requirements of 35 U.S.C § 101; and claims 19-24 have been canceled.

Therefore, the rejection of claims 17-24 under 35 U.S.C § 101 has been overcome.

IV.   **35 U.S.C. § 112, Second Paragraph**

The Examiner has rejected claims 1-24 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which applicants regard as the invention. This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

Claims 1-24 recites the limitation, 'indicators", where in the claims, this limitation is broadly and provides no adequate function/description. For example, "associating instructions in the routine of interest with a set of indicators to form a modified routine". Without functionality assigned to a generic claimed language, such as "a set of indicators", no one know what an 'indicator is, and what it does. An indicator could be a button, a sign, and/or a gate, a counter, a flag, setting in a register, triggers, etc. For examination, the interpretation for this language is a showing of a routine in a program which has a problem such as hotspot.

Since a language used in a claim requires not being vague, i.e. one cannot interpret it into many different meanings, this language used in the claims 1-24 renders the claims indefinite.

Office Action dated February 26, 2007, page 5.

By the present amendment, independent claims 1, 9 17 and have been amended to define the term "indicators" with greater specificity. More particularly, the indicators are now referred to as "performance indicators", and the independent claims have been amended to recite that "the set of performance indicators "comprises one of a set of performance indicators located in fields within the instructions and a set of performance indicators located in a shadow memory, and wherein the set of performance indicators identify that the instructions are to be monitored." In view of this clarifying language, the claims are clear and definite throughout and fully satisfy the requirements of 35 U.S.C. § 112, second paragraph, in all respects.

Claims 2, 10 and 18 depend from and further restrict claims 1, 9 and 17, respectively, and also satisfy 35 U.S.C § 112, second paragraph, in all respects. Claims 3-8, 11-16 and 19-24 have been canceled.

Therefore the rejection of claims 1-24 under 35 U.S.C § 112, second paragraph, has been overcome.

V.   35 U.S.C. § 102, Anticipation

The Examiner has rejected claims 1-24 under 35 U.S.C. § 102 as being anticipated by "Intel IA-64 Architecture Software Developer's Manua", Revision 1.1, Vol. 4, No. 245320-002, 7-2001 (hereinafter "Intel"). This rejection is respectfully traversed.

In rejecting the claims, the Examiner states:

> As Per Claim 1: Intel reference has 8 sections. Intel discloses,
> A *method in a data processing* system *for monitoring execution of instructions, the method comprising: responsive to identifying a routine interest during execution of a program, associating instructions in the routine of interest with a set of indicators* (sec. 6, p.7, i.e. triggers on events shown in table 6-2, see in the near end of the page, "registers indicate to...", see table 6.3, p. 10-11, and *sec.* 6, p. 13, "PMC/PMD register assignments for each monitoring feature...") to *form a modified routine* (See sec. 6, p. 5, "are interesting identifying performance bottlenecks and relating them back to their source code": *identifying a routine of interest during execution of a program) ; and*
> *responsive to execution of* instruction in *the modified routine* (i.e. the routine contains hotspot results by profiling) *during continued execution of the program, incrementing a counter* (i.e., the performance counters. For example, see *sec.* 6, Figure 6-5, p. 7).

Office Action dated February 26, 2007, page 6.

Claim 1, as amended herein, is as follows:

      1.   A method in a data processing system for monitoring execution of instructions, the method comprising:

      executing a program;

      identifying a routine that is used more than a threshold during execution of the program as a routine of interest;

      responsive to identifying the routine of interest during execution of the program, dynamically associating instructions in the identified routine of interest with a set of performance indicators to form a modified routine, wherein the set of performance indicators comprises one of a set of performance indicators located in fields within the instructions and a set of performance indicators located in a shadow memory, and wherein the set of performance indicators identify that the instructions are to be monitored; and

      responsive to execution of an instruction in the modified routine during continued execution of the program, incrementing a counter, wherein the counter provides a value identifying a number of times that the instruction in the modified routine is executed.

In rejecting original claim 3, the Examiner refers to page 3 of Section 6 of Intel as disclosing identifying a routine that is used more than a threshold number of times. Applicants respectfully disagree.

Intel discloses only that the processor includes thresholding capabilities, and that these capabilities can be used to plot an event distribution histogram to answer questions such as "for how many cycles did the memory request queue contain more than two entries?" or "during how many cycles did the machine retire more than three instructions?"

Intel does not disclose or anywhere suggest a method for monitoring execution of instructions that includes "identifying a routine that is used more than a threshold during execution of the program as a routine of interest", and "responsive to identifying the routine of interest during execution of the program, dynamically associating instructions in the identified routine of interest with a set of performance indicators to form a modified routine, wherein the set of performance indicators comprises one of a set of performance indicators located in fields within the instructions and a set of performance indicators located in a shadow memory, and wherein the set of performance indicators identify that the instructions are to be monitored" or "responsive to execution of an instruction in the modified routine during continued execution of the program, incrementing a counter, wherein the counter provides a value identifying a number of times that the instruction in the modified routine is executed."

Claim 1, accordingly, is not anticipated by Intel and patentably distinguishes over Intel in its present form.

Independent claims 9 and 17 have been amended in a similar manner as claim 1 and also patentably distinguish over the cited art in their present form.

Claims 2, 10 and 18 depend from and further restrict claims 1, 9 and 17, respectively, and also patentably distinguish over the cited art, at least by virtue of their dependency.

VI.   Conclusion

It is respectfully urged that the subject application is patentable over Intel and is now in condition for allowance, and it is respectfully requested that the Examiner so find and issue a Notice of Allowance in due course.

Applicants have amended claims 1, 2, 9, 10, 17 and 18 and canceled claims 3-8, 11-16 and 19-24 from further consideration in this application. Applicants are not conceding in this application that these claims are not patentable over the art cited by the Examiner, as the present claim amendments and cancellations are only for facilitating expeditious prosecution of the application. Applicants respectfully reserve the right to pursue these and other claims in one or more continuations and/or divisional patent applications.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: June 26, 2007

Respectfully submitted,

/Gerald H. Glanzman/
Gerald H. Glanzman
Reg. No. 25,035
Yee & Associates, P.C.
P.O. Box 802333
Dallas, TX 75380
(972) 385-8777
Attorney for Applicants